IN THE CLAIMS:

Please cancel claims 1 - 18 and 45 - 52, without prejudice.

1 - 18. (Cancelled)

19. (Original) A method of generating a database of information used to identify an object in an image, by querying a computer system comprising a lexicon of photo-interpreters, and formulating object extraction rules, comprising executing a computer program comprising information supplied by at least one expert photo analyst, and information input by a user.

20. (Original) The method of generating a database in accordance with claim 19, wherein said computer program further comprises extraction rule sets.

21. (Original) The method of generating a database in accordance with claim 20, wherein said information input by said user comprises one from the group of images, scenes, maps and computer text.

22. (Original) The method of generating a database in accordance with claim 21, wherein the computer programming language is pseudo-English.

23. (Original) The method of generating a database in accordance with claim 19, the steps further comprising marking an object on a display.

24. (Original) A method of training a user to become an expert in performing a task in a predetermined subject, by querying a computer system comprising a lexicon of words and phrases, and formulating rules dependent on said predetermined subject, the steps comprising:

a) providing a programming language comprising information supplied by at least one expert, said programming language comprising a predetermined vocabulary for facilitating descriptions of aspects of said subject; and

b) outputing results based on the queries of said user to aid in helping the user perform a task associated with said subject.

25. (Original) The method of training a user to become an expert in accordance with claim 24, the steps further comprising:

c) directing the computer system to generate descriptive words, phrases and rules for defining said feature of interest.

26. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, the steps further comprising:

c) marking a feature of interest of said presented results.

27. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said step (b) of outputing said results comprises displaying graphical results.

28. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said step (b) of outputing said results comprises generating audible signals.

29. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said step (b) of outputing said results comprises generating tactile results.

30. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said step (b) of outputing said results comprises generating odors.

31. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said feature of interest of said presented results comprises a step of a process.

32. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said feature of interest of said presented results comprises an object of an image or scene.

33. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said programming language comprises an editor.

34. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said editor is an expert editor.

35. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said programming language comprises an expert system.

36. (Original) The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said programming language is a pseudo-human language.

37. (Original) A method for generating a fraction plane in real time and for recognizing objects in a hyperspectral image cube that has a plurality of spectral regions, as a sum of a set of discrete data representative of each of said spectral regions, the steps comprising:

a) obtaining a set of calibration samples of a group of candidate objects; and

b) using a Newton gravity model to compute the cumulative influence of substantially all of said spectral regions on at least one of said spectral regions, building a pseudo multivariate distribution thereof.

38. (Original) The method for generating a fraction plane in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 37, the steps further comprising:

c) extracting recognizable features from said hyperspectral image cube.

39. (Original) The method for generating a fraction plane in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 37, wherein a physical-phenomenon model is stored in a library.

40. (Original) The method for generating a fraction plane in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 38, wherein said extraction step (c) is performed by utilizing a pseudo-English-language program.

41. (Original) A method for generating texture transforms substantially in real time and for recognizing objects comprising pixels in a hyperspectral image cube that has a plurality of spectral regions, as a sum of a set of discrete data representative of each of said spectral regions, the steps comprising:

a) obtaining a set of calibration samples of a group of candidate objects; and

b) computing the cumulative influence of at least some neighboring pixels of said spectral regions on at least one of said spectral regions.

42. (Original) The method for generating texture transforms substantially in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 41, the steps further comprising:

c) extracting recognizable features from said hyperspectral image cube.

43. (Original) The method for generating texture transforms substantially in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 41, wherein a physical-phenomenon model is stored in a library.

44. (Original) The method for generating texture transforms substantially in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 42, wherein said extraction step (c) is performed by utilizing a pseudo-English language program.

45 - 52. (Cancelled)